

US EPA ARCHIVE DOCUMENT



*The National Oil and Hazardous Substances
Pollution Contingency Plan (40 CFR 300.900)*



*Subpart J Product Schedule
Managed by EPA*

HOW DO YOU GET ON THE LIST?

- **General:** Short version of Material Safety Data Sheets, Screen for Heavy Metals, Screen for Chlorinated Hydrocarbons, Toxicity tests (except for bioremediation agents)
- **Bioremediation Agents:** Screen for Pathogens, 28-day Effectiveness Test
- **Dispersants:** Swirling Flask Test, Dispersant Effectiveness Test
- Proposed new protocols

BIOREMEDIATION AGENTS

- Microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge
- Bioremediation agents are typically used as a polishing step after conventional mechanical cleanup options have been applied
- NOT an open water tool



DISPERSANTS

- Those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column
- These products should not be confused with surface washing agents

Conditions that Affect the Use of Dispersants on Oil Spills

- **Favorable Conditions:**
 - Higher water temperatures and salinity
 - High waves prevent booms and skimmers from working effectively
 - Offshore dispersal - for industrial and municipal water intake protection
 - Prevent oiled seabirds and marine mammals
 - Sea dispersal can protect inshore breeding grounds
 - Prevent “mousse” or emulsion formations
 - To protect mangroves, coral reefs, salt marshes, sea grasses, and other sensitive areas
 - To prevent spill from reaching marinas, harbor facilities, aquaculture operations, shellfish harvesting operations, tourist beaches, and other economically important areas

Unfavorable Conditions:

- Very large oil spills (if used as the only response tool)
- Cold water temperatures, up for debate
- Calm seas
- Strong winds
- Lack of adequate equipment or trained personnel
- Small window of opportunity
- Weathered oil, high pour point, high viscosity
- Freshwater
- Near shore shallow waters and intertidal zones
- Lighter gasoline's and fuel oils due to high evaporation rates
- Confined harbors or bays
- Toxicity to native species. May effect the taste (contaminate) commercial fish species
- Spill is too close to coral reefs or fisheries (depends on species and life stage)

Dispersant conditions

- Sources include: U.S. EPA, National Academies of Science- Research Council, American Society for Testing and Materials, American Petroleum Institute, Environment Canada, and the International Tanker Owners Pollution Federation Limited





SURFACE WASHING AGENTS

- Any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column
- Surface washing agents are those where the released oil is (ideally) not dispersed but readily floats on the water surface and is recoverable. Thus, the washwater from these products should not be flushed into waterbodies, but should be contained, recovered, and properly treated



SURFACE COLLECTING AGENTS

- There are no products under this category
- The U.S. EPA may eliminate this category and incorporate future products under miscellaneous oil spill control agents

MISCELLANEOUS OIL SPILL CONTROL AGENTS

- Any product, other than a dispersant, sinking agent, surface washing agent, surface collecting agent, bioremediation agent, burning agent, or chem/bio based sorbent that can be used to enhance oil spill cleanup, removal, treatment, or migration
- Products include: emulsifiers, elastizers, chemical based sorbents, solidifiers, and mixed

Solidifiers V. Sorbents

- Regions/states have asked EPA and the NRT to help clarify what the difference is ?
- NRT fact sheet coming out soon
- Sorbents adsorb or absorb the oil
- Solidifiers react with the oil to form a cohesive mass
 - Solidifiers have to be on the Schedule
 - May be some exceptions
 - When in doubt—check it out !





AUTHORITY TO USE PRODUCTS

- Federal On-Scene Coordinators (U.S. EPA and U.S. Coast Guard), State with concurrence from Regional Response Teams make the decisions regarding Alternative Countermeasure use
- There is no federal mandate to use products on the schedule, however, RRTs/area planners shall address, as part of their planning activities, the desirability of using appropriate products

Human/Environmental Health Issues

- Endocrine disruptors - surfactants
- Proper PPE not being worn
- Full MSDS should be read
- No toxicity threshold so buyer/user beware!
- Insist products be on the Schedule or don't use them unless OSC says OK

FOR MORE INFORMATION

- Don't hesitate to call EPA Regional Offices
- Oil Spill Program Web Site
[www.epa.gov/oil spill](http://www.epa.gov/oil%20spill)
- Leigh Dehaven 202- 564-1974 for Product Schedule ?s
- William "Nick" Nichols 202- 564-1970 for use/policy issues

